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CLAIMS

(as amended under Art. 34 PCT)

1. A fuel cell system including:
 - a fuel cell body (S);
 - a first portion (2) and a second portion (7) which form a passage (2a, 5, 6, 7d) for hydrogen exhausted from the fuel cell body (S); and
 - 5 a hydrogen exhaust valve (3; 4) disposed in the passage (2a, 5, 6, 7d) between the first portion (2) and the second portion (7),
 - characterized in that
 - 10 the first portion (2) and the second portion (7) are directly fixed to each other and are both continuously supplied with heat from the fuel cell body (S) following start up of the fuel cell body (S).
- 15 2. A fuel cell system according to claim 1, wherein the first portion is a gas-liquid separation unit (2) supplied with heat from inflowing exhaust gas from the fuel cell body (S).
- 20 3. A fuel cell system according to claim 1, wherein the first portion is an end plate provided in a stack configured by the fuel cell body (S) and supplied with heat liberated by the stack.
- 25 4. A fuel cell system according to any one of claims 1 to 3, wherein the second portion is a hydrogen processing

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unit (7) supplied with heat from inflowing exhaust gas from the fuel cell body (S).

5. A fuel cell system according to claim 4, wherein the hydrogen processing unit is a dilation unit (7).

6. A fuel cell system according to claim 4, wherein the hydrogen processing unit is a combustion unit.

10 7. A fuel cell system according to any one of claims 1 to 6, wherein

one of the first portion (2) and the second portion (7) includes a cover (7a) formed with an internal space that accommodates the hydrogen exhaust valve (3, 4); and

15 the other one the first portion (2) and the second portion (7) closes the internal space of the cover (7a) within which the hydrogen exhaust valve (3; 4) is disposed.

20 8. A fuel cell system according to any one of claims 1 to 7, wherein a spring member (12; 13) is interposed between the hydrogen exhaust valve (3; 4) and one of the first portion (2) and the second portion (7) to urge the hydrogen exhaust valve (3; 4) against the other one of 25 the first portion (2) and the second portion (7).

9. A fuel cell system according to any one of claims 1 to 7, wherein the hydrogen exhaust valve (3; 4) is fixed to the first portion (2) and the second portion (7).

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10. A fuel cell system according to any one of claims 1 to 9, wherein seal mechanisms (8, 9; 10, 11) are respectively interposed between the hydrogen exhaust valve (3; 4) and each of the first portion (2) and the 35 second portion (7).